

ISLAMIC FINANCE TECHNOLOGY & INNOVATION



Technological advancement in finance provides better and faster access whilst providing newer financial transaction options. Currently, through internet and mobile banking, customers are able to execute financial and non-financial transactions from any location. As Islamic finance progresses, technology is becoming a key enabler for future business.



Financial Technology (FinTech) in Islamic Finance

The digital technology has expanded to include more innovation in the financial sector, such as innovations in financial literacy and education, retail banking, and investment.¹ Thus far, the financial technology industry has grown exponentially since 2011, and in 2015, the financial technology industry saw a USD16.5bn of funding, with a 22.2 percent y-o-y funding growth.²

To date, there are over 600 IFIs operating in about 75 countries across the globe

ranging from banking, takaful to capital market.³ Therefore as Islamic finance progresses, technology is becoming a key enabler for future business. IFIs offering Shariah-compliant products need a dedicated end-to-end Islamic banking system that facilitates and automates Shariah-compliant banking operations and enables banks to scale up their operations to meet global competition, grow market share, retain the loyalty of their customers and of more importance, enhance their profitability.⁴

Evolution of Financial Transactions – Conventional and Islamic Banks

Over the years, through technological advancements, conventional banks have evolved in the way they conduct their banking services and product distributions. Currently, through internet and mobile banking, customers are able to execute financial and non-financial transactions online, from any location. In regard to social media banking, digital consumers can interact online or set up a meeting with their relationship managers via unified communications technology before taking a decision on the best suited products or service offered by their banks.

Moving to Islamic banks, the once nascent segment which concentrated mainly on deposit-taking and retail financing schemes till the mid-1990s has now evolved into an integrated financial system. Through the advancement of technology, a growing number of Islamic banks are offering customer

services through digital channels. However in some jurisdictions where Islamic banks operate, majority of the customers still seem to prefer the brick and mortar structure than any other channels.⁵ While basic services like account inquiry and transfers are offered online, interactive and advanced services are yet to be offered through internet and mobile banking. But in recent times, the Islamic finance industry's scope is being widened to penetrate into newer growth areas among others include: to support green, ethical and environmentally-friendly development projects; to enable international risk management through Shariah-compliant hedging instruments; to forefront the increasing international halal trade business; to fund international infrastructure projects; and also to enhance liquidity management and capitalisation of Islamic financial institutions in line with newer regulatory requirements, for e.g., Basel III standards.⁶

¹ Investopedia

² "DIFC participates in UAE-Luxembourg meeting on Islamic finance, FinTech", CPI Financial (12th March 2016)

³ ISRA

⁴ "Technology boosts Islamic finance; ITS provides solutions", World Finance (3rd March 2014)

⁵ ISRA

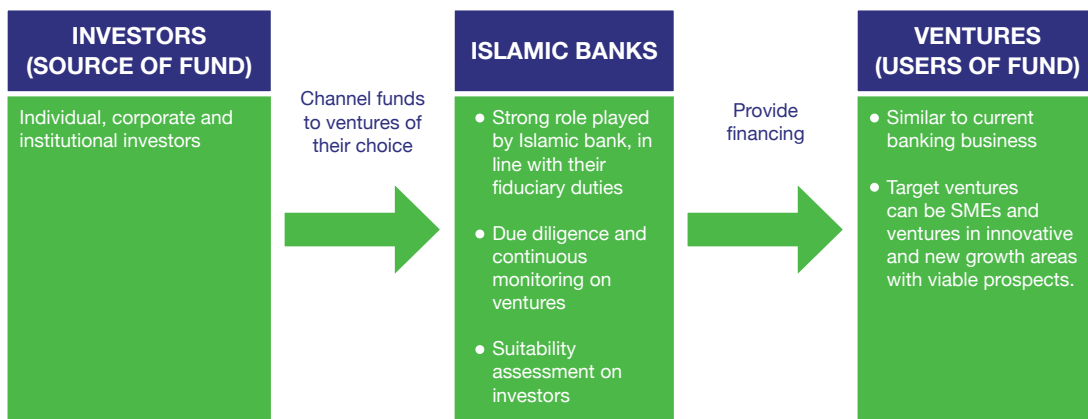
⁶ ISRA

Usage of FinTech in Selected Islamic Finance Jurisdictions

In key Islamic finance jurisdiction such as Malaysia, as part of the continued innovation of Islamic financial products, the country has recently launched an Investment Account Platform (IAP) which is envisaged to become a cross-border multi-currency channel linking into regional and global economies.⁷ The platform was developed by wholly-owned unit of Raed, IAP Integrated Sdn. Bhd., which comprised a consortium of several Islamic

financial institutions.⁸ Similar to many FinTech platforms such as crowd funding and peer-to-peer lending platforms, IAP facilitates direct investment by investors in viable ventures of their choices, however, a key differentiating factor of IAP is the roles undertaken by IFIs.⁹ Though IAP, it will provide investors with direct access to a broad range of investment opportunities, and businesses as well as Islamic banks with a new source of funding.¹⁰

Mechanics of IAP



Source: "Fintech in Islamic Finance as Malaysia launches Investment Account Platform (IAP)", islamicfinance.com

Apart from the above, successful online platform for commodity murabahah transactions can also be found in Malaysia. For example, Bursa Malaysia Bhd. has recently bagged the award for "Best Interbroker for Islamic Transaction" from Islamic Finance News (IFN) for its Bursa Suq Al-Sila (BSAS) online platform at the 10th Annual IFN Service Providers Poll.¹¹ The online platform is a Shariah-compliant commodity murabahah trading platform which facilitates murabahah and tawarruq transactions. From 2009 to 2014, the online platform experienced an annualized growth of 178 percent, attributed to increased acceptance and demand from global participants mainly from the MENA and Asian region for Shariah-compliant

products and services, reiterating its capability to further facilitate the expanding needs of Islamic finance globally.¹²

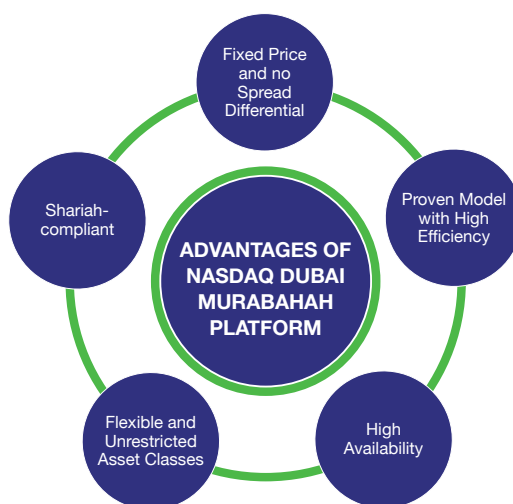
Moving to the GCC, a delegation from DIFC has recently participated in the UAE-Luxembourg Council for Cooperation and Development for Islamic Banking and Finance where the visit included engagements with industry experts to share insights on the sophistication and future of Islamic finance and the impact of FinTech.¹³ DIFC has emerged as an enabling platform for Islamic finance and FinTech, and with new innovations and support services, it has attracted numerous FinTech firms seeking to establish a presence in

⁷ "Fintech in Islamic Finance as Malaysia launches Investment Account Platform (IAP)", islamicfinance.com (7th March 2014)
⁸ "Islamic banks launch Investment Account Platform", Malaysia Daily Express (Feb 18th 2016)
⁹ "Islamic banks launch Investment Account Platform", Malaysia Daily Express (Feb 18th 2016)
¹⁰ "Fintech in Islamic Finance as Malaysia launches Investment Account Platform (IAP)", islamicfinance.com (7th March 2014)
¹¹ "Bursa's Islamic Trading Platform Wins Award", The Star Online (27th October 2015)
¹² "Bursa's Islamic Trading Platform Wins Award", The Star Online (27th October 2015)
¹³ "DIFC participates in UAE-Luxembourg meeting on Islamic finance, FinTech", CPI Financial (12th March 2016)

DIFC, including current and upcoming license.¹⁴ The UAE's Dubai Multi Commodities Centre (DMCC) Commodity Murabahah Trading Platform (CMTP) is one such initiative.¹⁵ The CMTP enables electronic transfer of ownership and possession through tradable warrants.¹⁶ Through CMTP, it provides a holistic solution to the Islamic finance industry through a fully electronic commodity murabahah trading platform with a complete transfer of ownership and possession of locally stored Shariah-compliant commodities in accordance with the applicable laws.¹⁷ Apart from DMCC CMTP, Dubai

in collaboration with Emirates Islamic (EI) and Emirates Islamic Financial Brokerage (EIFB) offers the Nasdaq Dubai Murabahah Platform – an online platform for Islamic financing.¹⁸ The platform utilizes Shariah-compliant certificates which are based on wakalah investments that have been developed as the underlying asset for all the financing transactions.¹⁹ Through the online platform, Islamic banks, Islamic windows and Islamic finance companies can offer cash financing to customers in an efficient, fast and flexible manner.²⁰

Advantages of Nasdaq Dubai Murabahah Platform



Source: Nasdaq Dubai

In Turkey, International Turnkey Solutions' (ITS) 'ETHIX' suite of financial products provides Islamic banks with a comprehensive total banking solution that is widely recognised as one of the most flexible and scalable technology solutions worldwide.²¹ Developed in accordance with Shariah guidelines, ETHIX empowers Islamic banks to improve operational efficiency and reduce cost of ownership in specific areas of Islamic banking, while

maximising opportunities for growth.²² It offers an integrated and comprehensive system for financial institutions and banks to deliver Shariah-compliant products.²³ ETHIX is in full compliance with the Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI) and International Accounting Standards (IAS).²⁴ As a standalone module, it is easy to integrate and offers full support through its back-end accounting functionalities

¹⁴ "DIFC participates in UAE-Luxembourg meeting on Islamic finance, FinTech", CPI Financial (12th March 2016)
¹⁵ "UAE's DMCC Commodity Murabahah Trading Platform (CMTP)", International Financial Law Review (IFLR) (27th August 2013)
¹⁶ "UAE's DMCC Commodity Murabahah Trading Platform (CMTP)", International Financial Law Review (IFLR) (27th August 2013)
¹⁷ "UAE's DMCC Commodity Murabahah Trading Platform (CMTP)", International Financial Law Review (IFLR) (27th August 2013)
¹⁸ Nasdaq Dubai
¹⁹ Nasdaq Dubai
²⁰ Nasdaq Dubai
²¹ "Technology boosts Islamic finance; ITS provides solutions", World Finance (3rd March 2014)
²² "Technology boosts Islamic finance; ITS provides solutions", World Finance (3rd March 2014)
²³ "Technology boosts Islamic finance; ITS provides solutions", World Finance (3rd March 2014)
²⁴ "Technology boosts Islamic finance; ITS provides solutions", World Finance (3rd March 2014)

with straight through processing (STP) built on an SOA platform and a web services based model.²⁵ ETHIX offers a complete repository of industry-specific products and functions for Islamic finance and investment, core banking, delivery channels, trade finance, branch automation, online banking, dashboards and comprehensive reports in addition to other banking services.²⁶

Elsewhere in the UK, many Islamic banks use commodities traded on the London Metal Exchange (LME) as their merchandise.²⁷ In addition, UK-based Path Solutions, a global provider of Shariah-compliant software solutions and software-enabled services to the Islamic financial services industry has recently awarded the Best Islamic Technology Provider by the IFN Best Service Providers Poll

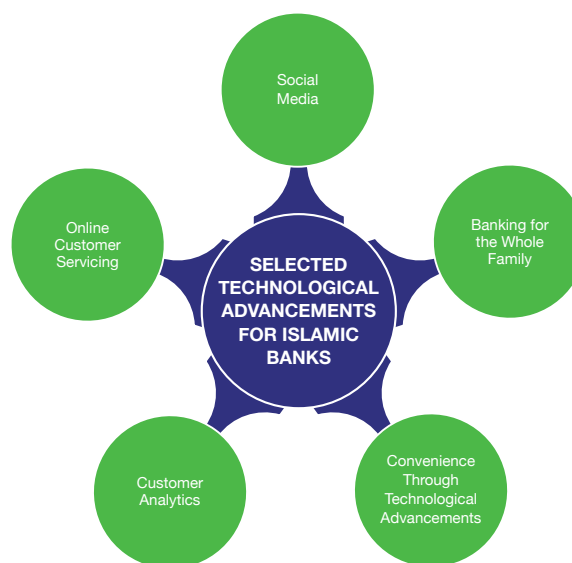
2015.²⁸ Path Solutions has been awarded as the “Best Islamic Technology Provider” for eighth year in a row.²⁹ This is mainly due to their strong uptake from a large number of existing clients across the Middle East, GCC and Asia Pacific.³⁰ Latest in this year, Path Solutions has recently signed up with a Tunisian-bank Wifak International Bank (“WIB”) to implement the new Islamic banking and investment system by Path Solutions.³¹ Through the new Islamic core banking system from Path Solutions, it is expected to usher a new era in the modernization of the Islamic banking operations, as the new system utilizes state of the art technology that will support the plan of “WIB” to provide a host of Shariah-compliant services to the customers in a suitable way.³²

Potential Opportunities for Islamic Finance

Through several technological advancements, various positive sentiments are shared by both Islamic banks and conventional banks. As the digital generation is on the rise, this is an opportune time for Islamic banks to tap these technological advances

and fulfil the ever increasing needs of the current digital generation. Technological innovations will be the key enabler for future financial services to meet global competition, grow market share, and of more importance, enhance profitability.

Selected Technological Advancements for Islamic Banks



Source: ISRA

²⁵ “Technology boosts Islamic finance; ITS provides solutions”, World Finance (3rd March 2014)
²⁶ “Technology boosts Islamic finance; ITS provides solutions”, World Finance (3rd March 2014)
²⁷ “Dubai to Challenge London with Islamic Financing Platform”, Reuters (2nd April 2014)
²⁸ <http://www.pathsolutions.com>
²⁹ <http://www.pathsolutions.com>
³⁰ <http://www.pathsolutions.com>
³¹ <http://www.pathsolutions.com>
³² <http://www.pathsolutions.com>

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